

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A membrane electrode unit for electrochemical equipment, containing comprising an ionically conductive membrane with a front side and back side, a first catalyst layer on the front side of the membrane, [[and]] a first gas distributor substrate [[on]] associated with the front side of the membrane and the first catalyst layer, [[and]] a second catalyst layer on the back side of the membrane, and a second gas distributor substrate [[on]] associated with the back side of the membrane and the second catalyst layer, in which and wherein the first gas distributor substrate has lesser surface dimensions smaller than those of the ionically conductive membrane and the second gas distributor substrate has essentially the same surface dimensions substantially equal to those of as the ionically conductive membrane.
2. (original) A membrane electrode unit according to claim 1, wherein the catalyst layer on the front side and the catalyst layer on the back side of the ionically conductive membrane have different surface dimensions.
3. (original) A membrane electrode unit according to claim 1, wherein the catalyst layer on the front side and the catalyst layer on the back side of the ionically conductive membrane have the same surface dimensions.
4. (currently amended) A membrane electrode unit according to claim 1, wherein a portion of the front side of the ionically conductive membrane on the front side has a surface that is not supported by [[a]] the first gas distributor substrate.

5. (original) A membrane electrode unit according to claim 1, wherein the catalyst layers on the front side and on the back side contain catalysts containing noble metals and optionally ionically conductive materials.

6. (original) A membrane electrode unit according to claim 1, wherein the ionically conductive membrane comprises organic polymers, such as proton-conducting perfluorinated polymeric sulfonic acid compounds, doped polybenzimidazoles, polyether ketones, polysulfones or ionically conducting ceramic materials, and has a thickness of 10 to 200 μm .

7. (original) A membrane electrode unit according to claim 1, wherein the gas distributor substrate comprises porous electrically conductive materials containing carbon fiber paper, carbon fiber nonwoven cloth, carbon fiber cloth, metal mesh, metallized fiber cloth, or combination thereof.

8. (currently amended) A membrane electrode unit according to claim [[1]] 4, wherein [[the]] an edge of the first gas distributor substrate and the free portion of the front side surface of the ionically conductive membrane not supported by [[a]] the first gas distributor substrate are surrounded by a sealing material.

9. (currently amended) A membrane electrode unit according to claim 8, wherein the sealing material additionally impregnates an edge region of the first gas distributor substrate[[s]] to a depth of at least 1 mm.

10. (currently amended) A membrane electrode unit according to claim 8, wherein the sealing material comprises a contains thermoplastic polymer[[s]] selected from the group consisting of polyethylene, polypropylene, polytetrafluoroethylene, PVDF, EPDM, polyester, polyamide, polyamide elastomers, polyimide, polyurethane, silicone, silicone

elastomers, and [[or]] combinations thereof and/or or a thermosetting polymer[[s]]
selected from the group consisting of epoxides, cyanoacrylates and [[or]] combinations
thereof.

11. (original) A membrane electrode unit according to claim 8, wherein the sealing
material is integrally combined with another peripheral plastic frame.

12. (original) A process for producing a membrane electrode unit according to claim 1,
comprising combining two catalyst-coated gas distributor substrates with the front and
back sides of an ionically conductive membrane.

13. (original) A process for producing a membrane electrode unit according to claim 1,
comprising combining two gas distributor substrates which are not catalyst-coated with
the front and back sides of an ionically conductive membrane coated with catalyst on
both sides.

14. (currently amended) A process for producing a membrane electrode unit
according to claim 8, wherein the portion of the front side surface of the ionically
conductive membrane not supported by [[a] the first gas distributor substrate is brought
directly into contact with a sealing material.

15. (original) A process for producing a membrane electrode unit according to claim 14,
wherein the sealing material is cured by elevated pressure and elevated temperature or by
contact with air moisture and/or elevated temperature.

16. (currently amended) A cell stack for electrochemical equipment comprising Use
of the membrane electrode unit according claim 1 to produce cell stacks for
electrochemical equipment.

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Page 6 of 9

17. (currently amended) A fuel cell for electrochemical equipment comprising Use
~~of the membrane electrode unit according to claim 1 to produce a fuel cell.~~

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